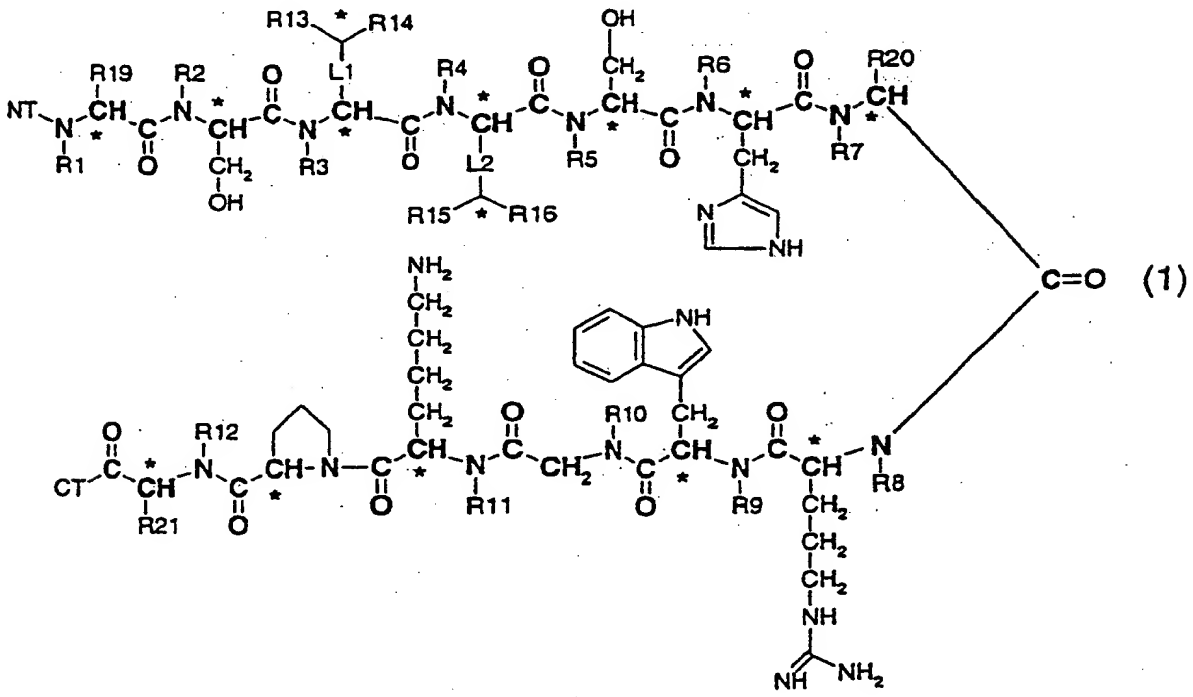
Amendments to the Claim:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (previously presented). A compound of general formula (1):



(1)

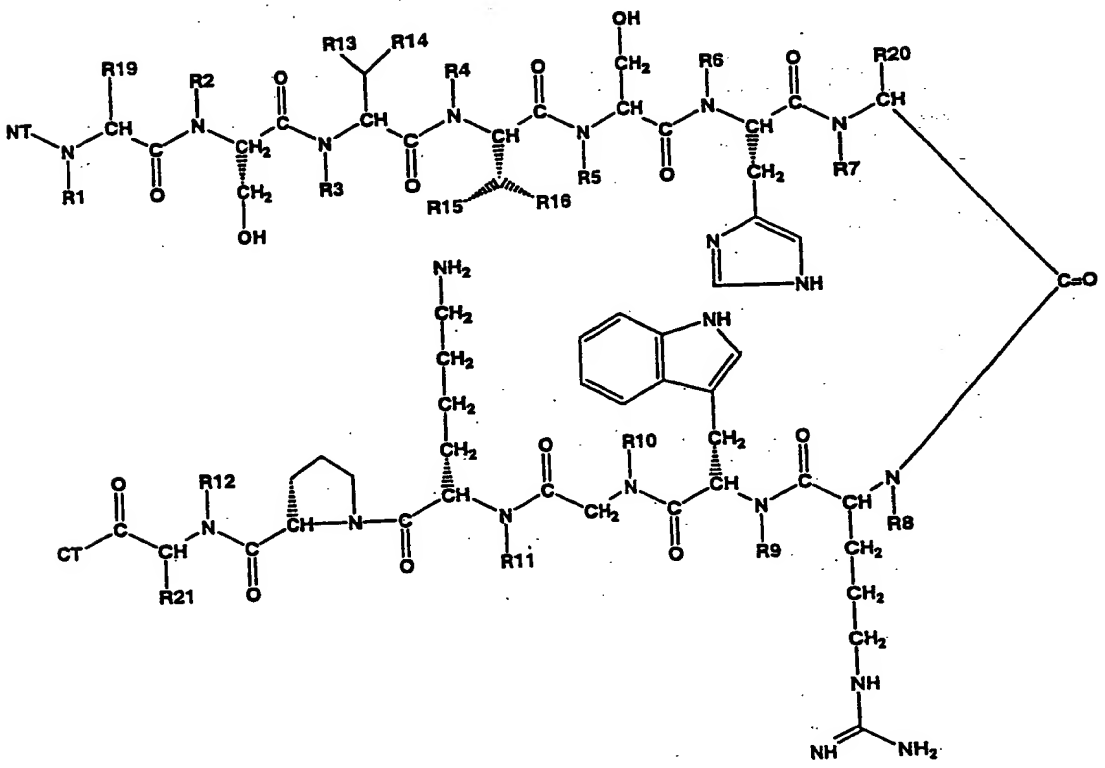
wherein R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11 and R12 are selected independently from H and methyl, and wherein R13, R14, R15 and R16 are selected independently from H and alkyl and wherein optionally one hydrogen in R13 and one hydrogen in R14 is exchanged for a bond between R13 and R14, and wherein optionally one hydrogen in R15 and one hydrogen in R16 is exchanged for a bond between R15 and R16, and wherein L1 and L2 are linkers which are independently selected from the group consisting of single bond, methyl, and ethyl,
and wherein R19, R20 and R21 are selected independently from H and $-CH_2X$, where X is H, alkyl, substituted alkyl, heteroalkyl,

substituted heteroalkyl, alkenyl, substituted alkenyl, heteroalkenyl, substituted heteroalkenyl, alkynyl, substituted alkynyl, heteroalkynyl, substituted heteroalkynyl, cycloalkyl, substituted cycloalkyl, cycloheteroalkyl, substitute cycloheteroalkyl, cycloalkenyl, substitute cycloalkenyl, cycloheteroalkenyl, substituted cycloheteroalkenyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, and functional group Q, where Q is selected from the group consisting of amino, alkylamino, dialkylamino, arylamino, arylazido, heteroarylamino, heteroarylazido, hydroxy, alkylhydrxy, fluorinated alkylhydroxy, cyano, carboxy, alkylcarboxy, arylcarboxy, halogen, nitro, hydroxylamino, acyl, fluorinated acyl, nitroso, sulfonyl, sulfinyl, thio, alkylthio, and arylthio, and wherein NT is selected from H, hydroxyl, alkyl, aminoacid, aminoacid analogue, polypeptide and functional group Q, and CT is selected from hydrogen, hydroxyl, alkyl, aminoacid, aminoacid analogue, polypeptide and functional group Q, and wherein each asymmetric center (*) is in R or S configuration.

2 (previously presented). The compound of claim 1, wherein R20 is $-CH_2X$, wherein X is phenyl.

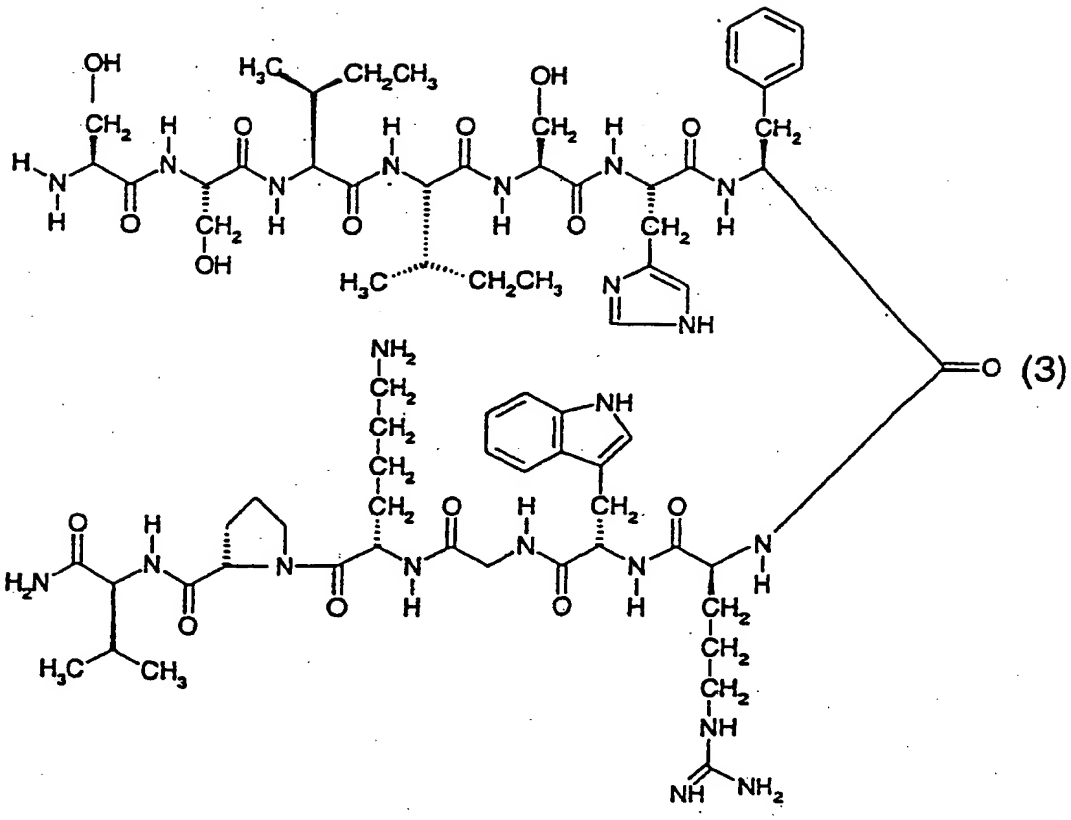
3 (previously presented) The compound of claim 1, wherein one or several of the nitrogens of the peptide backbone have been exchanged for carbon substituted with hydrogen, and/or wherein one or several of the oxygens of the carbonyl groups of the peptide backbone has been exchanged for two hydrogens.

4 (previously presented). The compound of claim 1, having the stereomeric conformation given in the general formula (2):

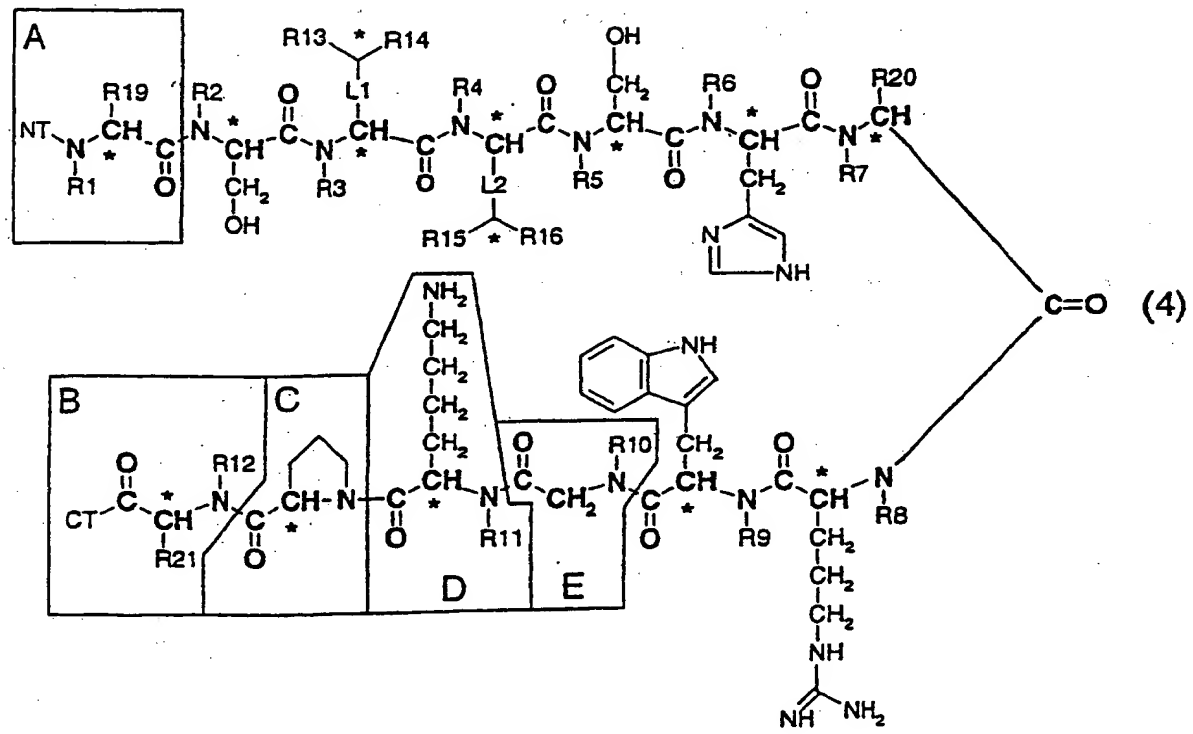


(2)

5 (original). A compound according to claim 1, of formula (2) (SEQ ID NO:1):



6 (currently amended). A compound ~~according to claim 1~~, of the general formula (4):



wherein moiety A is optionally exchanged for hydrogen, hydroxyl, alkyl, aminoacid, aminoacid analogue, polypeptide, or functional group,

wherein moiety B is optionally exchanged for hydrogen, hydroxyl, alkyl, aminoacid, aminoacid analogue, polypeptide, or functional group,

~~wherein optionally moiety C is exchanged for aminoacid or aminoacid analogue,~~

wherein optionally moiety D is exchanged for aminoacid or aminoacid analogue,

~~and~~ wherein optionally moiety E is exchanged for aminoacid or aminoacid analogue, wherein R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11 and R12 are selected independently from H and methyl, and wherein R13, R14, R15 and R16 are selected independently from H and alkyl and wherein optionally one hydrogen in R13 and one

hydrogen in R14 is exchanged for a bond between R13 and R14, and wherein optionally one hydrogen in R15 and one hydrogen in R16 is exchanged for a bond between R15 and R16, and wherein L1 and L2 are linkers which are independently selected from the group consisting of single bond, methyl, and ethyl,
and wherein R19, R20 and R21 are selected independently from H and $-CH_2X$, where X is H, alkyl, substituted alkyl, heteroalkyl, substituted heteroalkyl, alkenyl, substituted alkenyl, heteroalkenyl, substituted heteroalkenyl, alkynyl, substituted alkynyl, heteroalkynyl, substituted heteroalkynyl, cycloalkyl, substituted cycloalkyl, cycloheteroalkyl, substitute cycloheteroalkyl, cycloalkenyl, substitute cycloalkenyl, cycloheteroalkenyl, substituted cycloheteroalkenyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, and functional group Q, where Q is selected from the group consisting of amino, alkylamino, dialkylamino, arylamino, arylazido, heteroarylamino, heteroarylazido, hydroxy, alkylhydrxy, fluorinated alkylhydroxy, cyano, carboxy, alkylcarboxy, arylcarboxy, halogen, nitro, hydroxylamino, acyl, fluorinated acyl, nitroso, sulfonyl, sulfinyl, thio, alkylthio, and arylthio, and wherein NT is selected from H, hydroxyl, alkyl, aminoacid, aminoacid analogue, polypeptide and functional group Q, and CT is selected from hydrogen, hydroxyl, alkyl, aminoacid, aminoacid analogue, polypeptide and functional group Q, and wherein each asymmetric center (*) is in R or S configuration.

7 (previously presented). A compound according to claim 1, wherein one or several of R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11 and R12 are selected to be methyl, whereas the rest is selected to be hydrogen, the selections being made so as to prevent or decelerate breakdown by proteases and/or peptidases.

8 (previously presented). A compound according to claim 1, wherein less than 6 of the R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11 and R12 are methyl.

9 (previously presented). A compound comprising the sequence Ser-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2

(MS-05)(SEQ ID NO:1), wherein the amino-acids are all L-amino-acids;
or a compound comprising the sequence:
Ser-Ser-Ile-Ile-Ser-His-dPhe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-09) (SEQ ID NO:2).

10 (previously presented). A compound comprising one of the following sequences:
Ser-Ser-Ile-Ile-Ser-His-dPhe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-09) (SEQ ID NO:2),
Tyr-Ser-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-30) (SEQ ID NO:3),
Tyr-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-31) (SEQ ID NO:4),
Ser-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-Tyr-NH_2 (MS-32) (SEQ ID NO:5),
Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-33) (SEQ ID NO:6),
Thr-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-34) (SEQ ID NO:7),
Ser-Thr-Ile-Ile-Ser-His-Phe-Arg-Trp-GIy-Lys-Pro-Val-NH_2 (MS-35) (SEQ ID NO:8),
Ser-Ser-Val-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-36) (SEQ ID NO:9),
Ser-Ser-Ile-Val-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-37) (SEQ ID NO:10),
Ac-Ser-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-38) (SEQ ID NO:11),
dSer-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-39) (SEQ ID NO:12),
NMeSer-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-40) (SEQ ID NO:13),
Ser-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-NMeVal-NH_2 (MS-41) (SEQ ID NO:14) or
Ser-Ser-Ile-Ile-Ser-His-NMedPhe-Arg-Trp-Gly-Lys-Pro-Val-NH_2 (MS-42) (SEQ ID NO:15).

11 (currently amended). A compound according to claim 1, in which R20 is $-CH_2X$, wherein X is aryl, substituted aryl, heteroaryl, substituted heteroaryl, phenyl or substituted phenyl, wherein the compound is capable of activating MC1-receptors *in vitro*.

12 (currently amended). A compound according to claim 1, in which R20 is $-CH_2X$, wherein X is aryl, substituted aryl, heteroaryl, substituted heteroaryl, naphthalene, or substituted naphthalene, wherein the compound is capable of blocking MC1-receptors *in vitro*.

13 (previously presented). A compound according to claim 9, which inhibits NO (nitric oxide) production, or the formation of nitrite.

14 (previously presented). A compound according to claim 9, which is immunomodulatory.

15 (previously presented). A compound according to claim 9, which ameliorates or inhibits contact hypersensitivity.

16 (previously presented). A compound according to claim 9, which inhibits sensitization by a hapten.

17 (previously presented). A compound according to claim 9, which has the ability to induce hapten tolerance.

18 (previously presented). A compound according to claim 9, which ameliorates or inhibits formation of oedema.

19 (previously presented). A compound according to claim 9, which ameliorates or inhibits inflammation of blood vessels or vasculitis.

20 (previously presented). A compound according to claim 9, which normalizes blood cell counts, said blood cell counts prior to administration of the compound deviating from the normal.

21 (previously presented). A compound according to claim 9, which is capable of decreasing the formation of interleukin 1 (IL-1), interleukin 6 (IL-6), and/or tumour necrosis factor α (TNF-α), to afford decreased production of nitric oxide and/or to downregulate the activity of nitric oxide synthase (NOS).

22 (currently amended). A compound according to claim 9, which is capable of stimulating the *in vitro* production of interleukin 8 (IL-8) and/or interleukin 10 (IL-10).

23 (cancelled).

24 (previously presented). An acid salt of any one of the compounds of claim 9.

25-64 (cancelled).

65 (previously presented). A pharmaceutical composition comprising a compound according to claim 9 together with a pharmaceutically acceptable carrier.

66 (previously presented). A compound according to claim 16, said hapten being 2,4-dinitrofluorobenzene (DNFB).

67 (previously presented). A compound according to claim 17, said hapten being 2,4-dinitrofluorobenzene (DNFB).

68 (previously presented). A compound according to claim 9, which ameliorates or inhibits formation of oedema, said oedema being associated with allergic reactions or inflammation.

69 (previously presented). The compound of claim 1 which is capable of binding MC1 receptor in vitro.

70 (previously presented). The compound of claim 69 which is capable of activating MC1 receptor in vitro.

71 (previously presented). The compound of claim 69 which is capable of blocking MC1 receptor in vitro.

72 (previously presented). The compound of claim 1 which is capable of stimulating second messenger cAMP in vitro.

73 (previously presented). The compound of claim 1 which is capable of inhibiting NO production in vitro.

74 (previously presented). The compound of claim 9 which is capable of binding MC1 receptor in vitro.

75 (previously presented). The compound of claim 9 which is capable of activating MC1 receptor in vitro.

76 (previously presented). The compound of claim 9 which is capable of blocking MC1 receptor in vitro.

77 (previously presented). The compound of claim 9 which is capable of stimulating second messenger cAMP in vitro.

78 (previously presented). The compound of claim 9 which is capable of inhibiting NO production in vitro.

79 (new). The compound of claim 9 which is capable of decreasing the formation of interleukin-1 (IL-1) *in vitro*.

80 (new). The compound of claim 9 which is capable of decreasing the formation of interleukin-6 (IL-6) *in vitro*.

81 (new). The compound of claim 9 which is capable of decreasing the formation of tumor necrosis factor α (TNF-α) *in vitro*.

82 (new). The compound of claim 9 which is capable of decreasing the formation of interleukin-1 (IL-1) *in vitro*.

83 (new). The compound of claim 9 which is capable of downregulating the activity of nitric oxide synthase (NOS) *in vitro*.

84 (new). The compound of claim 9 which is capable of decreasing the formation of tumor necrosis factor α (TNF-α).